

Amendments to the Claims

Claims 1-81 (Cancelled).

Claim 82 (Currently amended): A process for the selective halogenation of C-3 fluorinated isomers within an isomeric mixture halogenating compounds comprising:

providing an isomeric a first mixture comprising both first and second isomers of a hydrofluorinated compound, the first mixture having a first ratio of the first isomer to the second isomer; and

contacting said mixture with Cl₂ in the presence of a catalyst at sufficient temperature to halogenate at least one isomer contacting the mixture with a halogenating agent to form a second mixture having a second ratio of the first isomer to the second isomer, the first ratio being less than the second ratio.

Claim 83 (Currently amended): The process of claim 82 wherein the isomeric mixture the hydrofluorinated compound comprises C₃F₇H, the first isomer comprises HFC-227ea CF₃CFHCF₃, and HFC-227ea the second isomer comprises CF₃CF₂CF₂H.

Claim 84 (Currently amended): The process of claim 82 wherein the catalyst comprises activated carbon further comprising contacting the mixture with the halogenating agent in the presence of a catalyst.

Claim 85 (Currently amended): The process of claim 82 wherein the contacting comprises heating the mixture to a the temperature is of from about 200°C to about 350°C.

Claim 86 (Currently amended): The process of claim 85 wherein the temperature is at least about 300°C.

Claim 87 (Currently amended): The process of claim 82 wherein the ~~molar ratio of Cl₂ to isomeric mixture is from about 0.16:1 to about 3:1 halogenating agent comprises Cl₂.~~

Claim 88 (Currently amended): The process of claim 87 wherein ~~the a molar ratio of the~~ Cl₂ to ~~isomeric~~ the mixture is from about 2.5:1 0.16:1 to about 3:1.

Claim 89 (New): The process of claim 88 wherein a molar ratio of the Cl₂ to the mixture is at least about 2.5:1.

Claim 90 (New): The process of claim 84 wherein the halogenating agent comprises Cl₂ and the catalyst comprises activated carbon.

Claim 91 (New): The process of claim 90 wherein the hydrofluorinated compound comprises C₃F₇H, the first isomer comprises CF₃CFHCF₃, and the second isomer comprises CF₃CF₂CF₂H.

Claim 92 (New): The process of claim 82 further comprising separating at least a portion of the first isomer from the second mixture.

Claim 93 (New): The process of claim 92 wherein the separating comprises distilling the second mixture to form a solution comprising the portion of the first isomer.